DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

DATE: May 9, 2016

BAAA

FROM: Brent A. Story, P.E., State Design Policy Engineer

TO: Divisions of Engineering, Operations, Construction, and Field Districts, Engineering

Services, OPD, IPD, TIA, & ACEC/Georgia

SUBJECT: GDOT Standard Design Criteria for Shoulder Width

This letter is to clarify the Department's policy on roadway shoulder width for new construction, widening, and reconstruction projects.

In 2014 the Transportation Research Board published NCHRP Report 783, *Evaluation of the 13 Controlling Criteria for Geometric Design*. The research results indicate that shoulder width should remain as a controlling criterion for rural two-lane highways, rural multilane highways, and rural and urban freeways. Furthermore the research indicates that shoulder width has the largest effect on crash frequency of any of the controlling criteria for rural highways, and that shoulder width has the largest effect on traffic speed of any of the controlling criteria for rural two-lane highways.

The Department's policy on roadway shoulder width is published in Chapter 6.5 of the GDOT Design Policy Manual. The normal shoulder width for collectors and arterials with design speeds greater than or equal to 50 mph is 10-ft wide. The normal shoulder widths for multilane freeways and interstates with design speeds greater than or equal to 50 mph is 14-ft overall outside shoulders with 12-ft paved, and 12-ft overall inside shoulders with 10-ft paved. These dimensions have been adopted as standard by the Department and are consistent with the preferable dimensions recommended by AASHTO for higher speed, higher volume, and heavy truck type facilities. Recommended shoulder widths for all other roadway functional classifications and design speeds are listed in the AASHTO Green Book.

To ensure decisions on shoulder widths are carefully considered, this letter is to clarify that any decision to use a shoulder width that does not meet the values adopted by the Department will require the prior approval of a Design Variance from the Chief Engineer. A decision to use a shoulder width that does not meet the "minimum values" recommended by AASHTO will require the prior approval of a Design Exception.

If you have any questions, please email <u>designexception@dot.ga.gov</u>. Or you may contact Walter Taylor, P.E., at (404) 631-1922 or Michelle Pate, P.E, at (404) 631-1771.

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